PROJECT NOTE

TO:	Project File
SUBJECT:	Jard Company, Inc.
TASK DESCRIPTION:	Sediment Sample Location Distance Measurements
TDD NO.:	13-09-0001
W.O. NO.:	20114-091-998-0904
TASK NO.:	60
DATE:	1 October 2013
PREPARED BY:	Stephanie Bitzas

Global positioning system data for on-site sediment soil sample locations were collected during field activities as part of the Site Reassessment Site Inspection. The subsequent map was viewed using the Environmental Systems Research Institute's (ESRI), ArcMap Geographic Information System (GIS) software version 10.0. The distance between selected sediment sample locations was determined by utilizing the measurement tool in the ArcMap GIS software. While utilizing this tool, the distance of each sediment sample from the Probable Point of Entry No. 1 (PPE No. 1) was measured along the center line of the Unnamed Stream. The PPE to Surface Water Pathway (SWP, Branch 1) is sediment sample SD-30. Below is a summary table of the distance from PPE No. 1 to each sediment sample location. The distances are presented in both miles and feet. See the attached Figure 1 for the locations of the collected sediment samples (Attachment A) and the attached Figure 2 for the locations of the Probably Points of Entry and the site sources (Attachment B).

No additional sediment samples were taken downstream of sediment sample SD-49; however, the distance between SD-49 and the end of the mapped PEM wetland along the Unnamed Stream was measured as 0.0208 miles (109.8 feet). The Unnamed Stream continues 0.0038 miles (20.1 feet) through an area of Palustrine Scrub-Shrub (PSS) wetlands, and then an additional 0.0008 miles (4.2 feet), before reaching the confluence with Furnace Brook. The total distance between SD-49 and the confluence with Furnace Brook was measured as 0.0254 miles (134.1 feet). These measurements were also determined using the same measurement tool and methodology as above.

Additionally, the same measurement tool and methodology was used to determine the distance between the eastern edge of the mapped wetland area where the Unnamed Stream flows onto property P030 from property P041 and sediment sample SD-41 (the most upstream sediment sample on property P041). The mapped wetland data layer collected during the wetland delineation was used to determine the edge of the Palustrine Emergent Marsh (PEM) wetland. The distance between the eastern edge of this PEM wetland and the first downstream sediment sample, SD-41, was measured along the center line of the unnamed stream and the distance was

measured as 0.0105 miles (55.4 feet). The distance between the eastern edge of this PEM wetland and the first upstream sediment sample, SD-40, was measured along the center line of the Unnamed Stream was 0.0171 miles (90.3 feet).

Using the same measurement tool and methodology as above, the distance between the eastern edge of the mapped wetland area where the Unnamed Stream flows onto property P030 from property P041 and PPE No. 1, was measured along the center line of the unnamed stream. The distance was measured as 0.1800 miles (950.4 feet).

Using the same measurement tool and methodology as above, the distance between the eastern edge of the mapped wetland area where the Unnamed Stream flows onto property P030 from property P041 and the most downstream sediment sample, SD-49, was measured along the center line of the unnamed stream. The distance was measured as 0.1273 miles (672.1 feet). In addition, the distance between the most downstream sediment sample, SD-49, and PPE No. 1 to the Surface Water Pathway, SD-30, was measured along the center line of the unnamed stream. The distance between SD-49 and SD-30 was measured as 0.308 miles (1,626.2 feet).

Using the same measurement tool and methodology as above, the distance between PPE No. 1 and the Jard Company, Inc. site sources was measured as 0.1251 miles (661 feet) for Source No. 1 and 0.2034 (1074 feet) for Source No. 2. PPE No. 1 and the site sources are shown in Figure 2.

Surface Water Pathway, Branch 2

Using the same measurement tool and methodology as above, the distance between PPE No. 2 and the Jard Company, Inc. site sources was measured as 0.0397 miles (209 feet) for Source No. 1 and 0.1022 (540 feet) for Source No. 2. PPE No. 1 and the site sources are shown in Figure 2.

Location	Distance From PPE (miles)	Distance From PPE (feet)
SD-30	0.0000 (PPE)	0.0
SD-31	0.0023	12.1
SD-32	0.0078	41.2
SD-33	0.0332	175.3
SD-34	0.0548	289.3
SD-35	0.0818	431.9
SD-36	0.1007	531.7
SD-37	0.1068	563.9
SD-38	0.1157	610.9
SD-39	0.1440	760.3
SD-40	0.1629	860.1
SD-41	0.1905	1005.8
SD-42	0.2035	1074.5
SD-43	0.2145	1132.6
SD-44	0.2302	1215.5
SD-45	0.2393	1263.5
SD-46	0.2603	1374.4
SD-47	0.2827	1492.7
SD-49	0.3080	1626.2
Total	0.308	1626.2

Attachment A

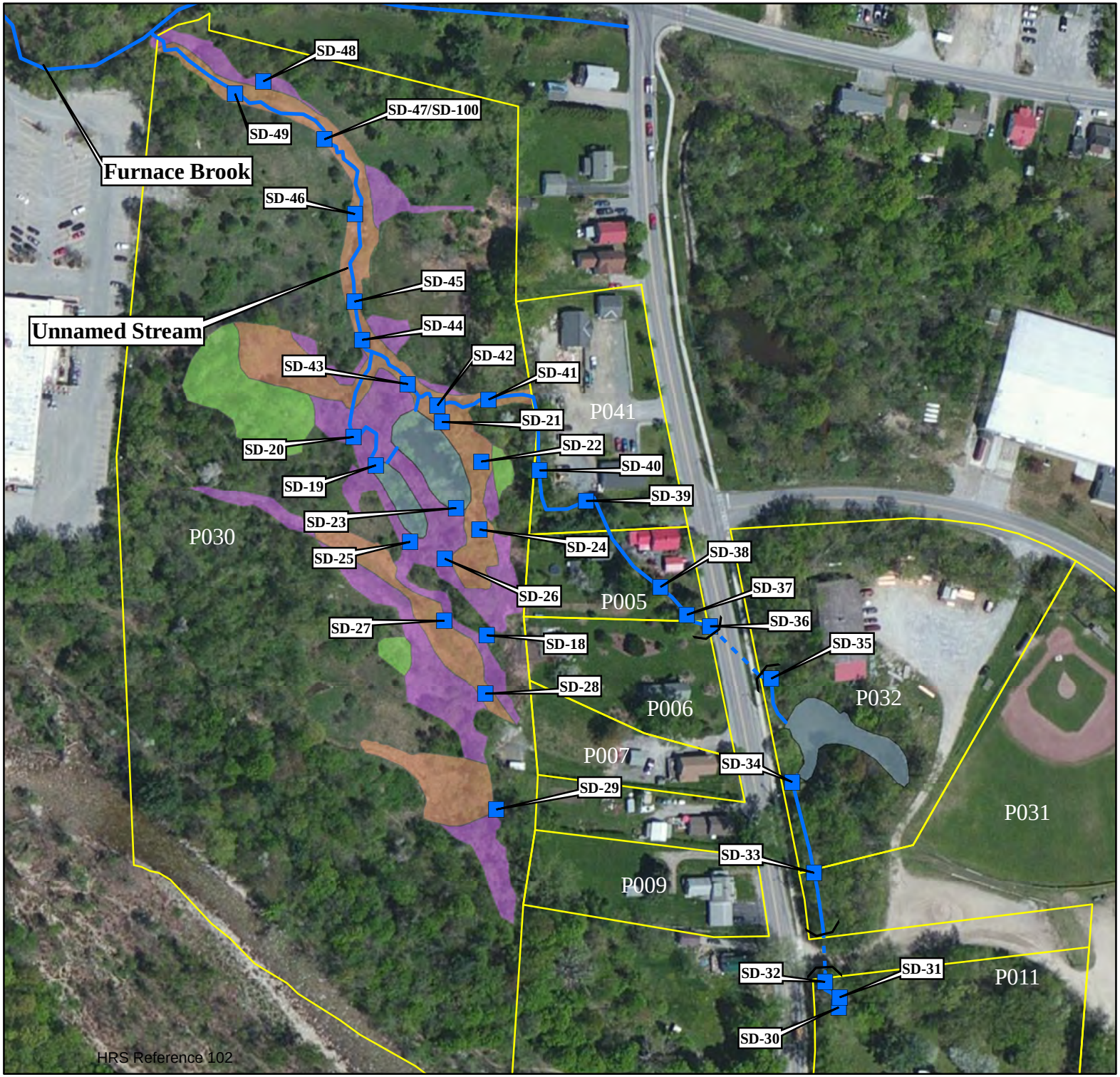

Figure 1

Release Wetland
Sediment Sample Location Map

Jard Company, Inc.
259 Bowen Road
Bennington, Vermont

EPA Region I
Superfund Technical Assessment and Response Team (START) III
Contract No. EP-W-05-042

TDD Number:	01-13-09-0001
Created by:	S. Bitzas
Created on:	30 September 2013
Modified by:	S. Bitzas
Modified on:	14 October 2013

Legend

- Sediment Sample
- Surface Water Stream
- Piped
- Approx. Property Boundary
- Water Body

Wetland Type

- Emergent
- Forested
- Scrub/Shrub
- Culvert
- Flow Direction

0 25 50 100 150 200 Feet

Data Sources:
Imagery: Bing Maps Aerial (Microsoft) [112]
Parcel Data: VT DEC GIS [111]
All other data: START

E:\Vt_gis\JardCoHRS\MXD\Project Notes\Figure 1 - Release Sediment Location Map.mxd

Attachment B

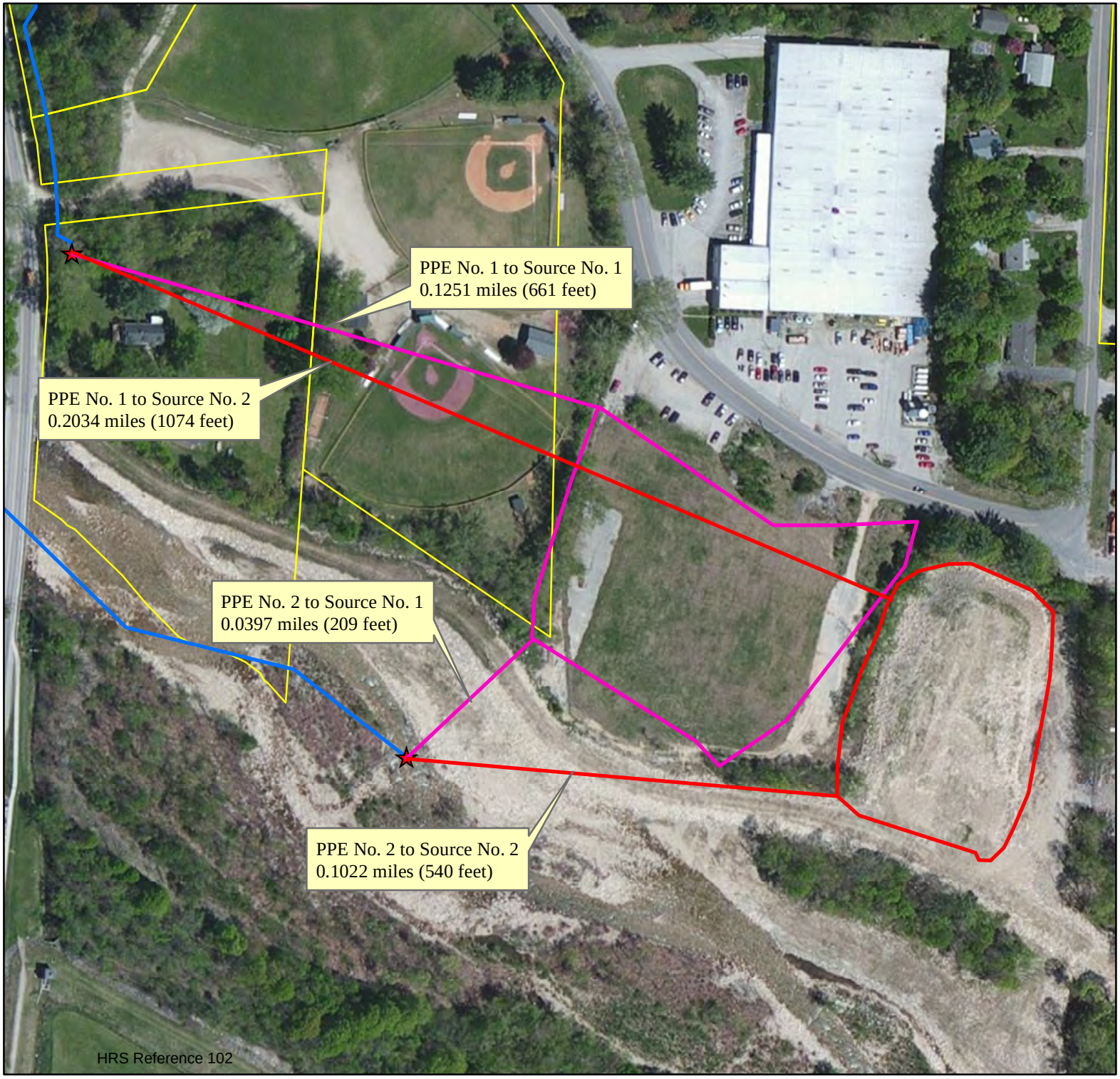

Figure 2

PPE Distances to Site Sources

Jard Company, Inc.
259 Bowen Road
Bennington, Vermont

EPA Region I
Superfund Technical Assessment and Response Team (START) III
Contract No. EP-W-05-042

TDD Number:	01-13-09-0001
Created by:	S. Bitzas
Created on:	14 October 2013
Modified by:	C. Dupree
Modified on:	7 March 2014

Legend

- Probable Point of Entry (PPE)
- Surface Water Pathway
- Source Area No. 1
- Source Area No. 2
- Approximate Property Boundary

0 25 50 100 150 200 Feet

Data Sources:
Imagery: Bing Maps Aerial (Microsoft) [112]
Parcel Data: VT DEC GIS [111]
All other data: START

E:\Vt_gis\JardCoHRS\MXD\Project Notes\Figure 2- UPDATED PPEtoSources.mxd